NEW YORK TRIBUNE, SUNDAY, EXCEMBER 217 1919. BEHIND THE SCENES IN A BIG DEPARTMENT STORE

mercial Cities Is Never Seen by Wayfarer. some ingenious person unafraid of warming up commercial life with a little sentiment adopted as a Christmas feature the idea of personifying curiosity. There was a long-nosed person who was an animated ques-

Goodly Part of Mechanism

tion mark and another lad with eyes extending a foot beyond his head who missed nothing in his long-range observation. The nose glowed with a supernatural redness, as if its owner had had a prolonged cold, and the eyes flamed like giant fireflies as the owner turned them in this direction and that. If the rosy-nosed lad could be multiplied a thousand times and the other had a thousand eyes, and they travelled together, they could not find out all of the daily activities of a department store. No, not in a thousand years.

"I've been here twenty-nine years, grew up with the business from boyhood, and I don't know all about it," said a department head of one of these great market places a few days

VARIETY OF ACTIVITIES HOUSED BY A DEPARTMENT STORE.

The very catalogue of the different kinds of workers is almost as long as one's arm. Besides, the "sales ladies" and "floor walkers" and messengers, who are most prominent in the eye of the shopper, there are professional shoppers who look after the mail orders-one store has as many as two hundred in this department alone - bookkeepers, auditors - a couple of hundred of them-cashiers, buyers, packers, shipping clerks, chauffeurs, drivers, mechanicians, veterinary surgeons, stable and garage men, porters, detectives, watchmen, engineers, firemen, plumbers, electricians, carpenters, cabinet makers, rug menders, cooks, bakers, candy makers, waiters, pianists, organists, singers, moving picture operators, dancers, models, decorators, painters, window dressers, guides, soda water clerks, photographers, stenographers, golf players, guides, nurses, opticians, jewellers, watchmakers, dressmakers, telephone operators, sweepers, inspectors, statisticians, maids, printers, advertisement writers, sign painters, laborers and school teachers, and this does not complete the list. The only difference between a department store and a city of equal population is that in the former there are no marriages nor giving in marriage, no churches, no cemeteries, no funerals, no hotels nor other sleeping places.

One-fourth of the force on the payroll is engaged in doing invisible things-doing something else than selling goods. In one store, employing at the holiday season upward of 7,500 persons, more than 1,800 are behind the scenes taking care of the merchandise and the money which makes the merchandise

In a department store there is never a moment when a human foot ceases to tread its aisles. All through the night watchmen pace back and forth between the shrouded tables of merchandise. They mark off the hours as they make their rounds, peering into the shadows cast by the scattered electric lights and looking forward to their daylight beds. At last the light of the coming day shows gray over the roofs of the buildings outside and gradually robs the electric globes of their ghostly glare. They prepare to give their charge into other hands, and a fresh shift of engineers and firemen knock at the door for admission. As the December sun begins to show its face over the rooftops the patient faces of the porters, day watchmen and vocal experts who operate the elevators to "Third floor, millinery, ladies' cloaks and furs," appear before the time recorder to have their arrival noted. By 7:30 o'clock some of the packers have forced their way past the recording angel. He is a devil if they are late. They are soon busy with goods left over from the night before and opening

course of the day. A half hour later and the earlier ranks of the mighty army of sales clerks present themselves at the employes' entrances. The great cloakrooms, crowded with scores of long racks furnished with shelves and hangers for thousands of coats and hats, begin to fill. The detectives and some of the heads of departments begin to arrive. It is expected that every salesgirl and every salesman will be at her or his post by 8:20 o'clock, ready to uncover the stock and dust it. Ten minutes later a bell rings. In one store the notes of a bugle ring out in addition.

fresh supplies that may be wanted in the

IN A CASUAL WAY BUSINESS HAS BEGUN.

Business has begun. It does not begin with a rush, however. Here and there is a straggler. A man wants a button put on his shoes. Another, having read an advertisement of a reduction in ready-made suits, drops in to see if he can be fitted. So it goes. In one store ten minutes after the doors open the employes are invited to an auditorium to take part in a "Sing." For a few minutes, under the leadership of jubilee singers, they let their voices ring out. Then for two hours such of the messengers as wish to do so go to school. In one store schools with teachers are provided for instruction in the common school branches and in such subjects as will fit for ; omotion.

About 11 o'clock the shoppers are coming in considerable numbers. With them come the "contingents." They are married women who spend their mornings at home and are employed to assist in the rush hours and while the other clerks are at their luncheons. This also is the beginning of the lunch hour, which is an hour 180 minutes long. One store provides clubhouses with restaurants, where good food may be secured at low rates; social rooms, rest rooms, gymnasiums and, for the girls in addition, a dancing room. These are

Which Store Is Fed Diof One of These Comvides Into Labyrinths of Chutes. ELEVATOR from the till by the deft fingers of the girl and open throughout the day. The last of the sent back on the wings of the wind to the waitcounters at 2 o'clock. By 3 o'clock trade is at

lunching clerks come trooping back to their its height, half of the day's business having been done up to this hour. The piles of packages in the sub-basement grow while the force in the "tube room" takes a fresh grip. Everything is going at full speed. Buyers are buying and manufacturers are selling, clerks are preparing new goods for the counters, heads of departments are planning special sales and the advertisement writers are examining goods in search of inspiration and winning words.

The other day the writer stood within the sacred precincts of the tube room. This, so to speak, is the bowl into which the money flows. Brass tubes in groups of six or eight line the room. In front of each bank of tubes sat a girl. In front of each girl was tilted a tin cash box. Crumpled bills and coins of various denominations filled its compartments.

Click! A little leather and brass carrier dropped from a tube. It was white, indicating that the customer was waiting in the expectation of taking her purchases home with her, of the slip asked as plainly as if it could speak audibly. "Is her account all right?"

In the centre of the room was a rectangular, boxlike counter. Upon it stood four great drawers, each carrying three rows of cards arranged as if it were a card index. On each card were twenty names and addresses. There must have been more than 20,000 names in all. It was the social register of the store. If your

name was recorded there as in good standing you could take the goods; if not, some other arrangement had to be made. The angel in the department store goes over the record every day. Every day names are added or subtracted. In the case of the special slip, which had just arrived via the tube, the name upon it was one of the many which the man "on the box" recognized as good on the list. The slip was, therefore, returned via the tube O. K.'d.

Click! In another part of the room another of the little carriers stuck its head out of the stoppered tube. "I have money," it seemed to say. So it had. The bill was quickly changer

ing customer. So with a click! here and a click! there, like so many kernels of giant corn in a monster popper, the coin poured into the coffers of the department store. "Not more than half the cash comes through the tubes," said the man in charge of the tube room. "The tubes are too slow for

much of our business. In addition to the ninety-odd tubes we have a hundred or more cash registers in different parts of the store. Each cashier, when she takes her position, is given a bag containing \$15 as her capital for making change. She keeps this as long as she is a cashier, it being her capital in trade. Every night she brings her bag of money and it is stored in the vaults over night, just as if this were a bank. We use up from \$1,500 to \$2,000 worth of small coin in the course of a day making change."

Then the writer was conducted into the subbasement. The hour was between 3 and 4 c clock, one of the busiest of the day. The place was a great labyrinth of chutes, like the renways of an icehouse in shape and size, but as polished and shining as a ballroom floor. There were belt pac-cage carriers and bins ef the size of small drygoods boxes. The packages were coming down through the spiral chutes from every story in the building with the speed and volume of a log jam.

The Great Hopper Through

There may be poverty and hard times elsowhere, but apparently not in the department stores. Long packages containing umbrellas, bandboxes evidently sheltering milady's finery, hat boxes covering silken tiles for the sock of pater familias or the son of the family at college, small parcels of jewelry, perhaps a ring or a bracelet or a lavalliere for mother or sister; or-and packages labelled "Glass," or "Fragile," or "Book." Yes, there were packages of glass and books, and they seemed to travel in the jam with no more danger than if they had been boxes of blocks. It was a veritable horn of plenty pouring out its treasures every second upon the shining tables.

There was no time, however, to stop to speculate regarding the contents or even look at the value. Each package must be hurried on its way or it would block the chute. A glance at the address and the color of the slip and a hastily written number and it passed on to its appropriate belt or slide. There can be no hesitation. The men who switch the packages must know instantly on which route 275 Central Park West, for instance, chances to be. There are nearly a hundred routes, each being numbered, radiating through Manhatta, Brooklyn, Staten Island, The Bronx and all the suburban communities on Long Island, Westchester County and Northern New Jersey, and a thousand packages an hour have to be distributed to them. Ceaselessly the men work, seeking to stem the tide of packages as it pour in upon them from the floors above. A department store is like London. It brings the wealth of the world to its door and takes its tithe for the trouble of breaking up the bulk and distributing it to the consumer.

No pianos or furniture, or bulk articles such as washboards, baskets, rocking horses and kitchen ware, come down the chute. They each reach their places of packing on elevators, and are boxed or wrapped as may be demanded. What a store of wrapping paper, excelsior, boxes, barrels and lumber goes into the packing rooms of a great department store!

The hands of the clock mark the time as 5 o'clock. The "contingents" drift toward the cloak rooms under the sidewalk, for there is supper to get at home, and perhaps a clamoring youngster. The throng of prospective purchasers grows thinner, remembering home, hubby and dinner. The packers and package men in the sub-cellar, on the other hand, speed up, for the stream of parcels, barometer of the day's business, grows in volume. In the tube room the popping of the tubes marks the increase in the volume of business.

The last hour of business is a slackening period for some of the workers, a speed period for others. As soon as the store closes certain stocks must give way to others. Supplies of goods must be brought from the stock to fill up the vacant tables. Certain windows are to be dressed.

A bell sounds. A bugle blows. It is 6 o'clock. Somehow the store seems vacant. A

## DR. WILEY SOUND TEETH A RAMPART AGAINST DISEASE, SAYS

HE danger of neglected teeth is greater than that of smallpox. This statement was made by Dr. H. W. Wiley, president of the National Mouth Hygiene Association, in an address that he recently delivered at Jacksonville, Fla. Dr. Wiley said also that hundreds of school children in Washington had never seen a toothbrush. It was almost incredible, he added, that such crass indifference, threatening the very foundations of the general health of society, should prevail in our large cities-Washington, in all probability, being typical of conditions that exist in many of the cities throughout the United States. "We now have a provision in our public

schools which excludes unvaccinated children," said Dr. Wiley. "This is a wise precaution to prevent the introduction of smallpox into the public schools. When it is remembered, however, that bad mouths, decaying teeth and neglected gums are doing far greater damage to the people of the City of Washington than smallpox, we may well ask why we are so careful in regard to the lesser damage and so negligent in the face of the greater. As I looked into the faces of these poorly nourished children, who, even if they had good food, would be unable to assimilate it properly, I was impressed with the magnitude of the work and the great underlying principles of humanity and philanthropy to which it owes its inception and to which it looks for support. It will evidently be some time before the school authorities of Washington are able to secure from Congress the necessary authority and facilities thoroughly to renovate the mouths of the school children of the city."

"For some time the City of Washington has instituted partial dental inspection of the children in the public schools. From the dental inspector I have obtained the following data: During the two years in which he has been engaged in dental inspection he has examined 10,230 of the school children of the city between the ages of six and sixteen years. He has found 32,307 cavities in the teeth of these

children. He has found that of the permanent teeth, 984 have been lost. He has found a total of 81,910 teeth that needed systematic cleaning and 6,056 that were so far decayed that they needed extracting. Of the total number of children examined, 9,071 had cavities in their teeth and 468 had abscesses at the roots of the teeth. A number of children whose mouths had been examined by the dental inspector were present for the clinic on the date mentioned. One need only look into these neglected mouths and note the ravages of disease and the lack of attention and cleanliness to understand the urgent necessity of work of

The work of conservation should not begin in the schools, Dr. Wiley declares, but long before the child is old enough to enter there. To do the most good, such a campaign should be instituted many years before the child's birth. For the production of a good set of permanent teeth it is important, he says, that the temporary teeth should be solid and enduring. When this is not the case, the permanent teeth are likely to be irregular and deformed. Decay in the first teeth that is not attended to is likely to deflect the direction of the permanent teeth and subject them to infection from contact with the decayed temporary teeth. Whoever fails to acquire good teeth in childhood will never have any, as the mature molars do not amount to much.

"Progressive measures have been started. On the twenty-third of November it was my good fortune to attend the first dental clinic ever held in the City of Washington," said Dr. Wiley. "Fifty of the progressive dentists of that city have made an agreement to give two hours of their time each month to a public school clinic and the Board of Education has set aside a small room in the Pierce school building for the installation of the operating room. Gifts of dental chairs and apparatus have been made by dentists and others, so that the room is now equipped with a small but effective set of apparatus suitable for clinical work on children.

"In Washington it is proposed to operate in the public school clinic only on those children whose parents are unable to meet the expense of the work. Children of parents who are able to pay for the work will be given a card, describing the nature of the work which is necessary to be done, for presentation to their parents, and the school authorities will urge upon the parents the importance of having this necessary work done. No attempt will be made at the present to bring any pressure to bear upon the parents, by excluding their children from the school or otherwise. It is evident, however, that the full value of the dental clinic in a case of this kind will not be secured until some method is devised to bring pressure to bear upon the parents in order that the dental work necessary may be done."

The main way to secure good teeth, Dr. Wiley maintains, is to give a young child a diet sufficiently rich in tooth building elements, such as clean, wholesome milk and cereals which have not been denatured. The foods to be avoided are starch, sugar, candy and hulled rice. It is a common idea, which he believed to be a correct one, that the eating of sugar candy is bad for the teeth, and his own experience has shown him that a child has no natural taste for sweet things.

"I believe we will come pretty close to striking the heart of the trouble," said Dr. Wiley, "when, through investigation and study, we come to the conclusion that the child's food is the dominant factor in the character of his teeth. In thus emphasizing this important fundamental principle I do not in the least intend to minimize the importance of caring for the teeth once they are formed. The child who has hard, sound, regular teeth needs to be taught the principles of proper care. This means, of course, in the first place, the proper functioning of the teeth. There must be an abundance of chewing of the right kind and it must be well done. The tooth is no different from any other organ in the body. To be in prime condition it must be properly exercised. In order that it may be kept from the ravages of decay it must be kept clean. Eternal vigilance is the price of good teeth."

A campaign for sound teeth among the children would result, he believes, in a higher standard of health throughout the country.

"Afer the age of childhood," said Dr. Wiley, "the care of the teeth, while not so important, is no less desirable. It is not at all uncommon at the present time to see men and women of middle age with false teeth or none at all. This, of course, means simply improper development of the teeth in the first place, or carelessness in their use in the second place. I do not know of any reason why the teeth should not last as long as the eye or the ear or any other organ of the body. While I am aware that age lessens the usefulness of all the organs of the body, I am an advocate of that course of life which would keep all of the organs in synchronic usefulness or in synchronic decay. My ideal of life is set forth in that wonderful poem of Dr. Holmes (which most people think is only a bit of fun, and yet it is the expression of the most salutary philosophy), namely, the story of the One-Horse Shay.

"I take it for granted that no one will doubt that the greatest of human blessings is health. We all approve the efforts which are being made everywhere to exclude the causes of disease, especially the causes of contagious and infectious diseases. To this end we establish quarantines, we destroy foci of infection and we arm the individual with an additional resistance by means of antiseptics and disinfectants. We teach in our schools and colleges the principles of sanitation. It is a matter of gratification that the principles, as well as the practice, of the sanitation of the mouth are not to be neglected. In one great institution of learning in this country there has been established a department of mouth hygiene, under the supervision of Dr. William J. Gies, who has already done special service in studying the chemistry of the mouth. Other great institutions have departments of sanitation, hygiene and public health. I feel quite certain that the example which has been set by Columbia University will be speedily followed by other institutions of learning throughout the

"Instructions of this kind will prove more effective than the teachings in the dental schools for professional students. It is a kind of instruction which will filter out through the newspapers and magazines and from the public schools and the pulpits of the country into the homes of all our people."

The danger of failure to care for the teeth in a proper manner was dwelt upon at length by him. A decaying tooth is always a menace, he says, particularly when the decaying process reaches below the gum.

"Ulcerations, Riggs's disease and other infections of the roots of the teeth are difficult of access and treatment," said Dr. Wiley, "and for this reason are always to be regarded as a dangerous condition. Aside from the pain and suffering which these diseases of the teeth produce, we must not forget the possibility of direct infection. So-called blood poisoning and death have been frequent sequels of diseased teeth. Some forms of inflammatory rheumatism are thought to be caused by the infection of pyorrhœa, and in general the health is injured in proportion as the teeth are affected.

"In the second place, defective teeth are a defect by reason of impairment of mastication and consequently of digestion. There is no difference of opinion concerning the value of good teeth, properly used in the preparation of food for the digestive processes. While the vigorous stomach may attack particles of food of considerable size and resistance, the process of digestion is naturally slowed up in proportion to the magnitude and firmness of the unground particles. In addition to this, the admixture of healthy saliva to the food during the process of mastication is of no little consequence, especially in the digestion of starch. Thus defective teeth not only injure by reason of imperfect mastication, but likewise by reason of a failure to incorporate the saliva properly with the finely divided particles of the food while it is still in the mouth."